CLAIMS

Sub A1

1. A method for purification treatment of an environmental pollutant, wherein the environmental pollutant and microorganisms are made to coexist with each other as incorporated in a microorganism-produced polymer.

2. The method according to claim 1, wherein the microorganism-produced polymer is a polymer containing a sugar component in which fructofuranosyl group(s) is/are bonded to a fructosyl group at the β-2,6 position.

3. The method according to claim 1, wherein the microorganism-produced polymer is a polyamino acid containing at least one amino acid selected from the group consisting of glutamic acid, leucine, alanine and phenylalanine.

4. The method according to claim 1, wherein the microorganism-produced polymer is a polyamino acid substantially consisting of glutamic acid, leucine, alanine or phenylamine.

5. The method according to claim 1, wherein the microorganism-produced polymer is a polyamino acid

containing at least 65% of one amino acid selected from the group consisting of glutamic acid, leucine, alanine and phenylalanine.

6. The method according to claim 1, wherein the microorganism-produced polymer is used in the presence of a cationic inorganic salt.

7. The method according claim 6, wherein the cationic inorganic salt is at least one member selected from the group consisting of aluminum chloride, aluminum sulfate, sodium aluminate, calcium chloride, ferrous sulfate, ferric chloride, iron (III) sulfate and copper chloride.

8. The method according to claim 1, wherein the microorganisms are at least one member selected from the group consisting of the genera *Pseudomonas*, *Rhodococcus*, *Aeromonas*, *Rhizobium*, *Sphingomonas*, *Arthrobacter*, *Frateuria*, *Flavobacterium* and *Bacillus*.

9. The method according to claim 1, wherein the environmental pollutant is at least one member selected from the group consisting of polychlorinated biphenyls, dioxins, dichloroethylenes, dichloroethanes,

trichloroethylenes, trichloroethanes, mercury and its compound, and selenium and its compounds.

10. A microbial treatment agent comprising microorganisms incorporated in a microorganism-produced polymer.

11. The microbial treatment agent according to claim 10, wherein the microorganisms are at least one member selected from the group consisting of the genera *Pseudomonas*, *Rhodococcus*, *Aeromonas*, *Rhizobium*, *Sphingomonas*, *Arthrobacter*, *Frateuria*, *Flavobacterium* and *Bacillus*.

12. The microbial treatment agent according to claim 10, wherein the microorganisms are a mixture of at least two members selected from the group consisting of the genera *Pseudomonas*, *Rhodococcus*, *Aeromonas*, *Rhizobium*, *Sphingomonas*, *Arthrobacter*, *Frateuria*, *Flavobacterium* and *Bacillus*.

13. The microbial treatment agent according to claim 10, wherein the microorganism-produced polymer is a polymer containing a sugar component in which fructofuranosyl group(s) is/are bonded to a fructosyl

group at the β-2,6 position, or a polyamino acid containing at least one amino acid selected from the group consisting of glutamic acid, leucine, alanine and phenylalanine.

14. The microbial treatment agent according to claim 10, wherein the microorganism-produced polymer is a polyamino acid substantially consisting of glutamic acid, leucine, alanine or phenylalanine.

15. The microbial treatment agent according to claim 10, wherein the microorganism-produced polymer is a polyamino acid containing at least 65% of one amino acid selected from the group consisting of glutamic acid, leucine, alanine and phenylalanine.

16. The microbial treatment agent according to claim 10, wherein the microorganism-produced polymer is used in the presence of a cationic inorganic salt.

17. The microbial treatment agent according to the claim 16, wherein the cationic inorganic salt is at least one member selected from the group consisting of aluminum chloride, aluminum sulfate, sodium aluminate, calcium chloride, ferrous sulfate, ferric chloride, iron

(III) sulfate and copper chloride.

18. The microbial treatment agent according to claim 10, for use in assimilation or degradation of an environmental pollutant.

19. The microbial treatment agent according to claim 18, wherein the environmental pollutant is at least one member selected from the group consisting of polychlorinated biphenyls, dioxins, dichloroethylenes, dichloroethanes, trichloroethylenes, trichloroethanes, ethylenes, mercury and its compounds, and selenium and its compounds.